



# Starters and Plenaries

## Theme 1: Introduction to Markets and Market Failure

[zigzageducation.co.uk](http://zigzageducation.co.uk)

POD  
7436

Publish your own work... Write to a brief...  
Register at [publishmenow.co.uk](http://publishmenow.co.uk)

# Contents

|  |           |
|--|-----------|
| Thank You for Choosing ZigZag Education.....                   | ii        |
| Teacher Feedback Opportunity.....                              | iii       |
| Terms and Conditions of Use .....                              | iv        |
| Teacher’s Introduction.....                                    | 1         |
| Activity-by-activity Plan .....                                | 2         |
| <b>1.1 Nature of Economics .....</b>                           | <b>6</b>  |
| Activity 1 – What is Economics?.....                           | 6         |
| Activity 2 – The Economic Problem .....                        | 7         |
| Activity 3 – Production Possibility Frontiers .....            | 8         |
| Activity 4 – Specialisation and the Division of Labour .....   | 9         |
| Activity 5 – Types of Economy.....                             | 11        |
| <b>1.2 How Markets Work.....</b>                               | <b>12</b> |
| Activity 6 – Income/Cross Elasticity of Demand (YED/XED) ..... | 12        |
| Activity 7 – Price Elasticity of Demand.....                   | 13        |
| Activity 8 – Elasticities .....                                | 15        |
| Activity 9 – Elasticities 2 .....                              | 16        |
| Activity 10 – Elasticities 3 .....                             | 18        |
| Activity 11 – Supply and Demand .....                          | 19        |
| Activity 12 – Consumer Behaviour .....                         | 20        |
| Activity 13 – Indirect Taxes.....                              | 21        |
| Activity 14 – Subsidies .....                                  | 22        |
| Activity 15 – Consumer and Producer Surplus .....              | 23        |
| Activity 16 – Price Mechanism .....                            | 24        |
| Activity 17 – Price Determination .....                        | 25        |
| <b>1.3 Market Failure.....</b>                                 | <b>26</b> |
| Activity 18 – Market Failure .....                             | 26        |
| Activity 19 – Market Failure 2 .....                           | 27        |
| Activity 20 – Market Failure 3 .....                           | 28        |
| <b>1.4 Government Intervention .....</b>                       | <b>29</b> |
| Activity 21 – Government Intervention .....                    | 29        |
| Activity 22 – Government Failure.....                          | 30        |
| <b>Answers .....</b>   | <b>31</b> |

# Teacher's Introduction

This resource is an activities-only resource that has been designed to support the learning and teaching of Edexcel Theme 1. These useful activities will help to either switch pupils into learning mode at the beginning of the session or to wind down and take learning right up to the end of the lesson. Students will build on their understanding of key terms while developing new knowledge that is integral to the specification.

There are 22 activities in this resource, which closely follow the specification order, and can be conducted as individual, group or full-class activities. Teacher's notes, plus an activity-by-activity plan, are provided at the beginning of the resource to give guidance on how to teach the content. Some of this guidance includes additional activities.

The starters and plenaries included are designed to help teachers prevent any breaks in students' learning by encouraging them to recap previously studied topics or begin to learn new ones. Each activity sheet should take between 10 and 20 minutes to complete. The end of the resource includes an answer sheet for students and/or teachers to use in marking.

It is hoped that this resource, as well as offering support for teaching the essential elements of the Edexcel examination, will help students build on any knowledge they already have.

Happy teaching!

June 2017

## Free Updates!

Register your email address to receive any future free updates\* made to this resource or other Economics resources your school has purchased, and details of any promotions for your subject.

\* resulting from minor specification changes, suggestions from teachers and peer reviews, or occasional errors reported by customers

Go to [zzed.uk/freeupdates](http://zzed.uk/freeupdates)

## Activity-by-activity Plan

| Spec Area                | Topic                                 | Activity Description  | Notes  |  |
|--------------------------|---------------------------------------|---|--|---|
| 1.1. Nature of Economics | What economic records followed        | Activity 1 – ... identifying positive/normative statements  | Individual tasks (but can be done in pairs as well, where students can compare their answers)  | ✓   |
|                          | The economic problem                  | Activity 2 – Discussing the economic problem using image prompts followed by answering a couple of questions (includes QS skills) | In pairs   |   |
|                          | Production possibility frontiers      | Activity 3 – Complete the graph and complete the table task   | Teacher can lead both activities<br>- Draw and label axes on the board and call upon student to complete the graph<br>- Erasing the board with potential business decisions and their opportunity costs                    |   |
|                          | Specialisation and division of labour | Activity 4 – Identifying various arguments for and against the division of labour and then filling in a table.                    | Students work in pairs as per the instructions. The second part works as pair work.<br><br>Note that for the second activity, the student on the pro-specialisation and division of labour side is the most likely to win! |   |
|                          | Types of economy                      | Activity 5 – Research task followed by some guess-the-country/person tasks  | Full-class activity. Only do this task after students have been taught about Adam Smith, Karl Marx and Friedrich Hayek.  | ✓   |
| 1.2. How Markets Work    | Income / cross elasticity of demand   | Activity 6 – Match-up activity followed by two more questions   | Work individually (or in pairs)  | ✓   |
|                          | Price Elasticity of Demand            | Activity 7 – ...  | Work individually (or in pairs)  | ✓   |

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



| Spec Area             | Topic             | Activity Description   | Notes   |  |
|-----------------------|-------------------|--|---|---|
| 1.2. How Markets Work | Elasticities 1    | Activity 8 Diagram-based Questions   | <p>Tasks to be completed in small groups of 4-5 and when answers compared to other groups. Encourage students to work collaboratively supporting each other.</p> <p>Note that students should be reminded of the formulae for PED, YED, XED and PES before starting the task</p>  | ✓   |
|                       | Elasticities 2    | Activity 9 A game of noughts and crosses played by correctly answering questions | <p>Split the class into two groups. Only one person can answer from the group at a time.</p> <p>Play a game of noughts and crosses on the white board. One-by-one choose an individual from each group to ask a question. The groups will only get to put a nought or a cross if the chosen person from their group has answered correctly. Note the answers refer to the tables (see bold terms) but they have been converted into questions so they can readily be asked of students.</p> | ✓   |
|                       | Elasticities 3    | Activity 10  | <p>Split the class into four groups. Nominate one person from each group as the 'leader'.</p> <p>Cut out the cards below and hand one to the team leaders. One person from the team needs to try and explain the term to their teammates without using the words listed underneath.</p> <p>If they use any of the forbidden words, they will not be allowed to complete the task. Another student may be called upon.</p>   |   |
|                       | Supply and demand | Activity 11 – Answering questions  | <p>Tasks can be completed individually or in pairs. Questions can be used as a starter activity.</p>  | ✓   |

INSPECTION COPY

COPYRIGHT PROTECTED



| Spec Area                     | Topic                         | Activity Description  | Notes  |  |
|-------------------------------|-------------------------------|---|--|---|
| 1.2. How Markets Work (cont.) | Consumer behaviour            | Activity 11 – Spot the errors followed by a behavioural economics game                          | 1 can be done individually. 2 can be done in pairs.  | ✓   |
|                               | Indirect taxes                | Activity 13 – Calculation tasks   | Students should be divided into groups of 6, where each student from the group answers just one part. The next student needs the answer from the first student to answer his/her part. | ✓   |
|                               | Subsidies                     | Activity 14 – Improvement task followed by calculation task                                     | Work individually  | ✓   |
| 1.2. How Markets Work         | Consumer and producer surplus | Activity 15 – Quick OS with some diagrams and analysis  | Work individually  | ✓   |
|                               | Price mechanism               | Activity 16 – Identifying functions of price, followed by identifying true and false statements | Work individually  | ✓   |
|                               | Price determination           | Activity 17 – Spotting errors in diagrams and redrawing them                                    | Pair work  |   |
| 1.3 Market Failure            | Market failure                | Activity 18 – Writing down definitions  | Pair work where students work individually and then mark each other's paper  | ✓   |
|                               | Market failure 2              | Activity 19 – Illustrating information on a diagram (storyboard)                                | Individual task. The teacher should correct students' answers as they go.  |   |
|                               | Market failure 3              | Activity 20 – Identifying the type of market failure followed by a question                     | Individual task  | ✓   |

INSPECTION COPY

COPYRIGHT PROTECTED

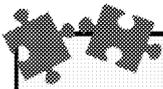


| Spec Area                   | Topic                   | Activity Description                                   | Notes   |  |
|-----------------------------|-------------------------|--|---|---|
| 1.4 Government Intervention | Government intervention | Activity 21 – Presentation task                        | Work in groups of four. PowerPoint is not essential. Students should plan their presentations using the blank slides that have been provided. |   |
|                             | Government failure      | Activity 22 – Understanding concepts and match-up task | Individual work   | ✓   |

INSPECTION COPY

COPYRIGHT  
PROTECTED

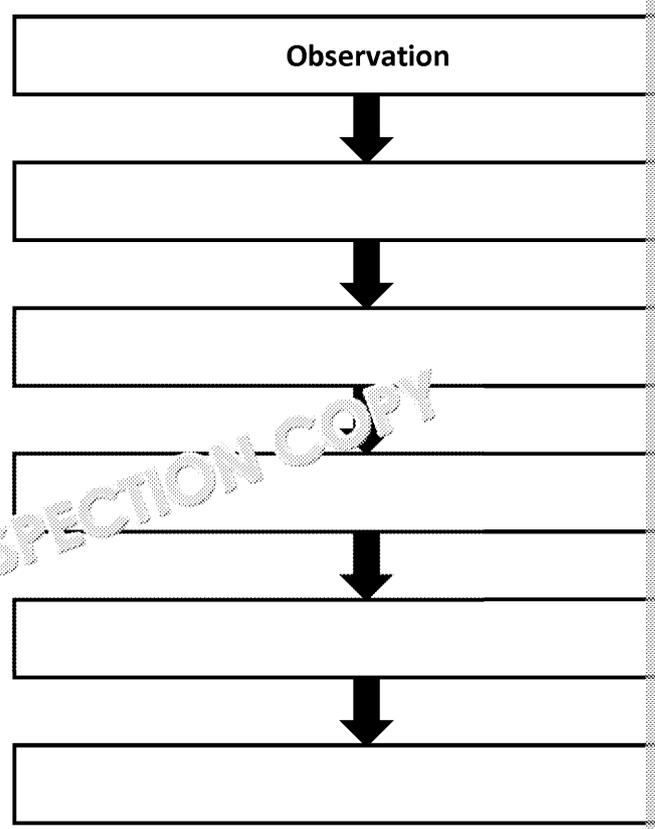




# Activity 1 – What is Economic

1. Economic models are slightly different to scientific models. Complete the missing processes involved using words/phrases from the following box. for you:

|                                      |  |
|--------------------------------------|--|
| <i>forming evidence</i>              | <i>forming evidence</i>                  |
| <i>hypothesis becomes theory</i>     | <i>theory becomes fact</i>               |
| <i>evidence supports predictions</i> | <i>ceteris paribus</i>                   |
| <i>forming predictions</i>           | <i>if experiment supports hypothesis</i> |



2. State whether each statement below indicates a positive (P) or a normative (N) statement.

- The Bank of England has set the interest rate at a record low of 0.25%
- The government is considering imposing a sugar tax.
- The Bank of England and the government have set the interest rate at 0.25%,
- The Bank of England aims to keep the inflation rate at about 2%.
- The perfect level of inflation is the perfect level of inflation.

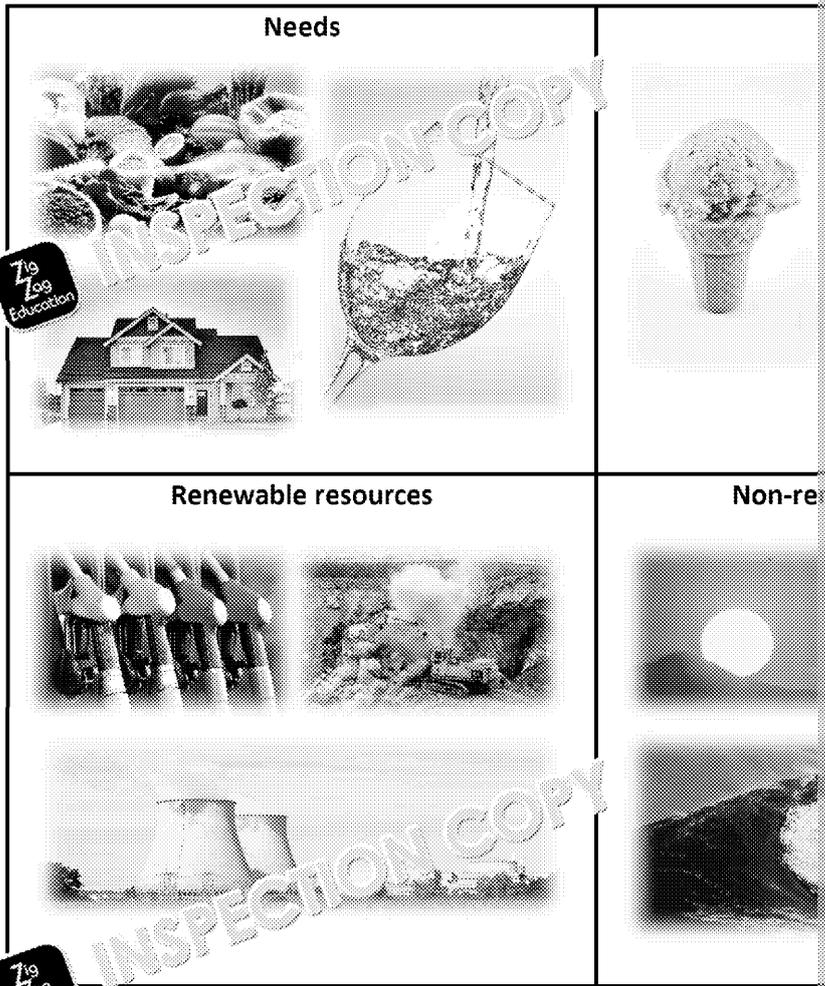
INSPECTION COPY

COPYRIGHT PROTECTED



## Activity 2 – The Economic Problem

1.



Discuss, in pairs, the economic problem represented by these pictures.

2. a) Explain to your partner what the term opportunity cost means without using the term.
- b) A businessman has already reinvested in his business and expects to earn a 10% return. He is now looking to buy some shares on the stock market, whose return is expected to be 15%. A similar investment in government bonds might yield 12%.

What will be the opportunity cost of investing in government bonds?

.....

.....

.....

.....

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 3 – Production Possibility

- One student will be picked from your class to draw one of the following on a grid:
  - PPF
  - Label the axes
  - The maximum productive potential of an economy
  - Efficient allocation of resources
  - Inefficient allocation of resources
  - Unattainable level of production
  - Opportunity cost
  - Shift in economic growth
  - Shift in production

(Note: you may need to draw a separate pair of axes for drawing the shifts)

- The opportunity cost is the value of the next best alternative forgone. A business may decide to purchase a new van, but this means that they cannot afford to purchase circular saw equipment. These pieces of equipment are the *opportunity cost* of purchasing the new van.

Complete the following table with potential opportunity costs of the business decision.

| Business Decision                                | Possible Opportunity Cost |
|--|---------------------------|
| Clothes shop purchases a new line of clothes     |                           |
| Business firm repays its loan                    |                           |
| School employs more lunchtime staff              |                           |
| Record shop pays a musician to visit and play    |                           |
| Educational publisher writes a new business book |                           |
| Football club buys foreign player                |                           |
| Bank opens in a new location                     |                           |

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 4 – Specialisation and the of Labour

1. Work in pairs and establish whether the following quotes are for or against

*'The man whose whole life is spent in performing a few simple operations are perhaps always the same, or very nearly the same, has no occasion to exert his faculties, or to exercise his invention in finding out expedients for his improvement. He naturally loses, therefore, the habit of such exertion, and becomes as stupid and ignorant as it is possible for a human creature to become.'*

Adam Smith

*'When every individual person labours a-part, and only for himself, he can never execute any considerable work; his labour being employ'd in supplying the necessities, he never attains a perfection in any particular art.'*

David Hume

*'Through cooperation, the needs of a number of persons, many times greater than the number, can be satisfied.'*

Ibn Khaldun

*'The greatest improvement in the productive powers of labour, and the dexterity, and instrument with which it is anywhere directed, or applied, are the effects of the division of labour.'*

Adam Smith

*'... he is thus depressed spiritually and physically to the condition of a man whose labour is an abstract activity...'*

Karl Marx

*'We owe the origin and development of human society and, consequently, civilisation, to the fact that work performed under the division of labour is more productive than when performed in isolation.'*

Ludwig von Mises

*'Where the different kinds of manufactures are not distinguished and divided, work of all kinds is done by the same manufactures remain still in the greatest degree of ignorance.'*

Immanuel Kant

INSPECTION COPY

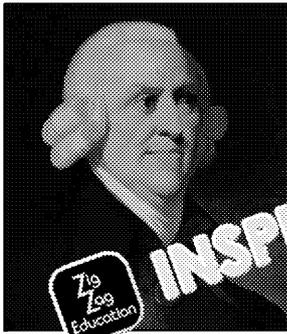
COPYRIGHT  
PROTECTED





## Activity 5 – Types of Economies

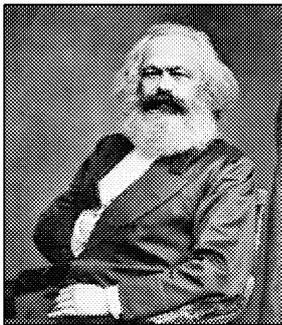
1. Match the quotes to the economists



Adam Smith

'It is not from the benevolence of the brewer or the baker, that we expect our bread and meat, but from their regard to their own interest.'

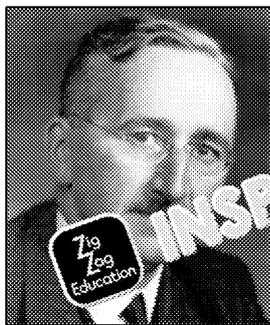
'Each tries to establish over the other an advantage, so as thereby to find satisfaction in his need.'



Karl Marx

'In the Western world some people are threatened by the extremes of capitalism due to circumstances beyond their control. It has been accepted as a duty of the state to provide social insurance.'

'Communism is the riddle of history which no great mind has yet known itself to be this solution.'



Friedrich Hayek

'The natural effort of every individual to improve his own condition... is so powerful, it is never checked, without any assistance, ... capital and labor combine to produce wealth and prosperity.'

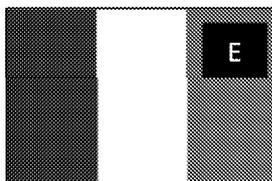
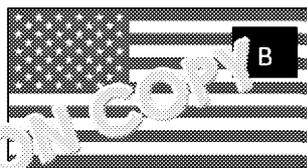
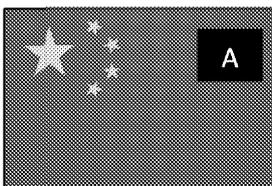
'There is no reason why... the state should be required to organize a comprehensive social insurance.'

2. Place each country / territory on the continuum from free market to command



Command Economy

Mixed



INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 6 – Income/Cross Elasticity of Demand (YED/XED)

1. Match-up the following:



Positively elastic demand

Positively inelastic demand

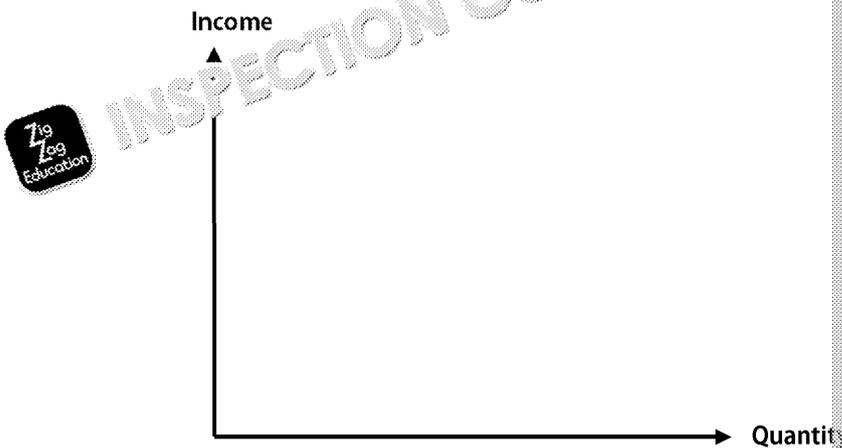
$0 < YED < 1$

$YED < 0$

Normal/luxury good

Inferior good

2. Draw the demand curves for luxury and inferior goods on the same axes



3. a) Define cross elasticity of demand.

.....

.....

b) Pepsi and Coca-Cola are close substitutes. Explain how it will help that the XED between these two drinks is +1.5.



.....

.....

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 7 – Price Elasticity of Demand

1. Explain what is meant by price elasticity of demand (PED).

.....

.....

.....

2. Write the formula for PED?

.....

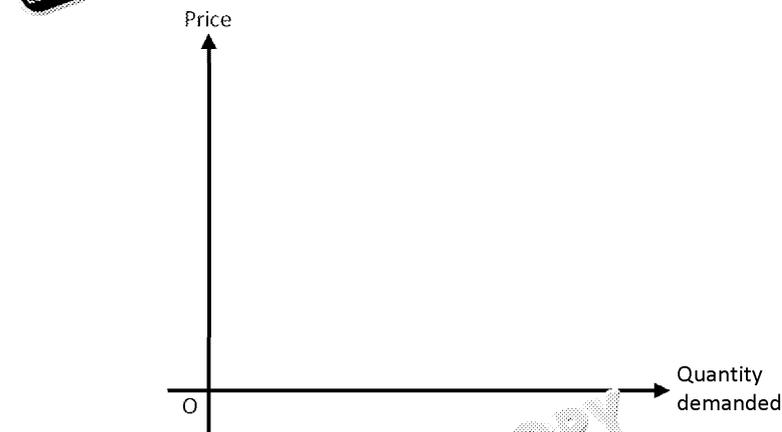
.....

.....

3. a) Identify the problem with the following formula and write out the correct formula.

$$\text{Total revenue} = \frac{\text{Price}}{\text{Quantity}} \times 100$$

- b) On the axes below show how a fall in price will lead to an increase in total revenue.



INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 7 – continued

- c) On a separate diagram, show how an increase in price will lead to a decrease in total revenue by a smaller proportion.



INSPECTION COPY

- d) When is total revenue maximised?

.....

.....



INSPECTION COPY



INSPECTION COPY

INSPECTION COPY

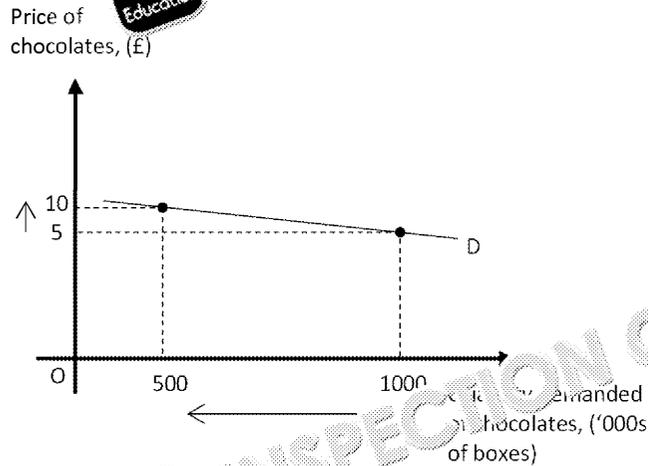
COPYRIGHT  
PROTECTED



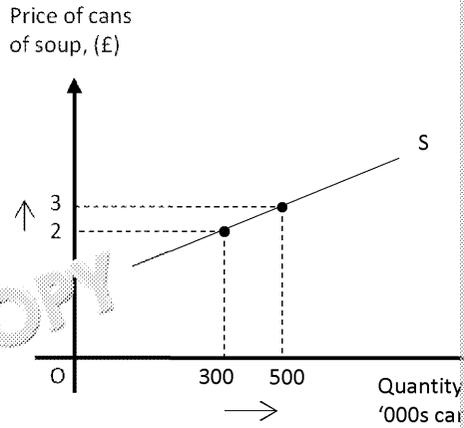
# Activity 8 – Elasticities

1. In your group, look at the graph you have been given and work out the answer. Then compare your answers and supporting each other.

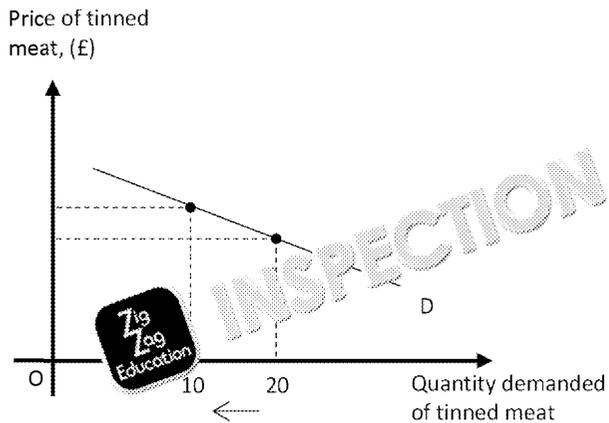
Calculate the price elasticity of demand of a box of chocolates. Is the demand price elastic or inelastic?



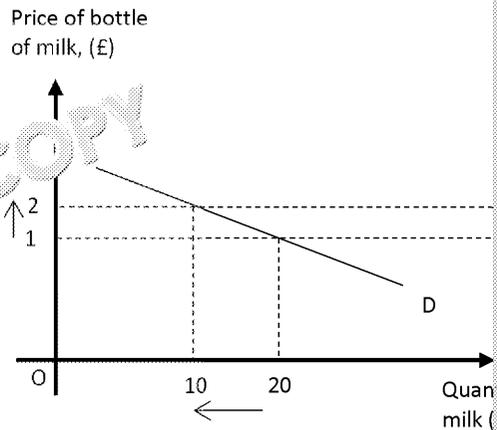
Calculate the price elasticity of supply of a can of soup. Is the supply price elastic or inelastic?



Real income increases from £1,000 to £1,500 a month. Calculate the income elasticity of demand of tinned meat. What type of good is this?



Calculate the cross elasticity of demand between milk and tinned meat. What type of good is tinned meat?



INSPECTION COPY

COPYRIGHT PROTECTED



## Activity 9 – Elasticities 2

### Teacher Sheet

- Split the class into two groups to play a game of noughts and crosses on the whiteboard. Assign one individual from each group to ask a question. The groups will only get to put a nought or cross if the question from their group has answered correctly. Note the questions are all in the tables (some have been converted into questions so they can readily be asked of students).

**Question:** Interpret the numerical values of PED, XED, YED and PES.

| PED value   | Level of elasticity  |
|---|--|
| What does <b>PED &gt; 1</b> tell us about the demand?     | What is the numerical value of <b>relatively elastic</b> ?   |
| What does <b>PED &lt; 1</b> tell us about the demand?     | What is the numerical value of <b>relatively inelastic</b> ? |
| What does <b>PED = 1</b> tell us about the demand?        | What is the numerical value of <b>elastic</b> ?              |
| What does <b>PED = 0</b> tell us about the demand?        | What is the numerical value of <b>perfectly inelastic</b> ?  |
| What does <b>PED = infinity</b> tell us about the demand? | What is the numerical value of <b>perfectly elastic</b> ?    |

| YED value   | Level of elasticity of demand  |
|---|--|
| What does <b>YED &gt; 0</b> tell us about the demand?         | What is the numerical value of <b>positively elastic/inelastic</b> ? |
| What type of good does <b>YED &gt; 0</b> depict?              | What is the numerical value of <b>normal</b> ?                       |
| Give an example of a good with <b>YED &gt; 0</b>              | What is clothing an example of?                                      |
| What does <b>YED &lt; 0</b> tell us about the demand?         | What is the numerical value of <b>relatively inelastic</b> ?         |
| What type of good does <b>0 &lt; YED &lt; 1</b> depict?       | What is the numerical value of <b>necessity</b> ?                    |
| Give an example of a good where <b>YED</b> is between 0 and 1 | What is milk an example of?  |
| What does <b>YED &gt; 1</b> tell us about the demand?         | What is the numerical value of <b>relatively elastic</b> ?           |
| What type of good does <b>YED &gt; 1</b> depict?              | What is the numerical value of <b>luxury good</b> ?                  |
| Give an example of a good with <b>YED &gt; 1</b>              | What is television an example of?                                    |
| What does <b>YED = 1</b> tell us about the demand?            | What is the numerical value of <b>unit elastic</b> ?                 |
| What type of good does <b>YED = 1</b> depict?                 | What is the numerical value of <b>normal</b> ?                       |
| What does <b>YED &lt; 0</b> tell us about the demand?         | What is the numerical value of <b>negatively elastic/inelastic</b> ? |
| What type of good does <b>YED &lt; 0</b> depict?              | What is the numerical value of <b>inferior</b> ?                     |
| Give an example of a good with <b>YED &lt; 0</b>              | What is tinned meat an example of?                                   |

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 9 – Elasticities 2 (con

| XED value                                     | Level of elasticity of demand   |
|---|---|
| What does $XED > 0$ tell us about the demand? | What is the numerical value of <b>positively elastic/inelastic</b> ?              |
| What type of good does $XED > 0$ depict?      | What is the numerical value of <b>substitute good</b> ?                           |
| Give an example.                              | What are tea and coffee examples?   |
| What does $XED < 0$ tell us about the demand? | What is the numerical value of <b>negatively elastic/inelastic</b> ?              |
| What type of good does $XED < 0$ depict?      | What is the numerical value of <b>complementary good</b> ?                        |
| Give an example.                              | What are cars and fuel examples?  |
| What does $XED = 0$ tell us about the demand? | What is the numerical value of <b>relationship</b> between the demand and supply? |
| What type of good does $XED = 0$ depict?      | What is the numerical value of <b>unrelated</b> ?                                 |
| Give an example.                              | What are phones and jackets examples?   |

| PES value   | Level of elasticity of supply                                |
|---|--|
| What does $PES > 1$ tell us about the supply?               | What is the numerical value of <b>relatively elastic</b> ?   |
| What does $PES < 1$ tell us about the supply?               | What is the numerical value of <b>relatively inelastic</b> ? |
| What does $PES = 1$ tell us about the supply?               | What is the numerical value of <b>elastic</b> ?              |
| What does $PES = 0$ tell us about the supply?               | What is the numerical value of <b>perfectly inelastic</b> ?  |
| What does $PES = \text{infinity}$ tell us about the supply? | What is the numerical value of <b>perfectly elastic</b> ?    |

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 10 – Elasticities 3

### Teacher Sheet

Split the class into four groups. Nominate one person from each group as the

Cut out the cards below and hand one to the team leader. One person from the team will be responsible for passing the term to their teammates without using any of the words listed underneath.

If they use any of the forbidden words, they will not be allowed to complete the task and will be called out.

Here are the cards:



#### Price elasticity of demand

- Price
- Elasticity
- Demand
- Elastic
- Inelastic
- Perfectly
- Unitary
- Relatively

#### Price elasticity of supply

- Price
- Elasticity
- Supply
- Elastic
- Inelastic
- Perfectly
- Unitary
- Relatively

#### Cross elasticity of demand

- Cross elasticity
- Elasticity
- Demand
- Elastic
- Inelastic
- Substitutes
- Complementary
- Relatively
- Perfectly

#### Income elasticity of demand

- Income
- Elasticity
- Elastic
- Inelastic
- Normal goods
- Inferior goods
- Luxury goods
- Relatively



COPYRIGHT  
PROTECTED



INSPECTION COPY

## Activity 11 – Supply and Demand

INSPECTION COPY

Oil prices are very volatile. During the 2008 global financial crisis, a fall in demand led to the plummeting prices. Although global demand is still somewhat weak, and the renewable energy sector, the main explanation for the more recent price fall is there is a glut of supply.

1. Show the above information on a supply and demand diagram (*remember*



2. Why are oil prices volatile?

.....

.....

.....

.....

.....

.....

.....

3. In pairs discuss why the demand curve is downward-sloping and the supply



COPYRIGHT  
PROTECTED



## Activity 12 – Consumer Behaviour

- Spot the errors in the two paragraphs below and correct them in 30 seconds.
  - People are always rational. Consumers want to satisfy their needs and choose expensive products because they are likely to be higher quality. Their energy suppliers when it benefits them. Firms, too, are rational. As a result, firms will be happy to operate at lower profit margins, as long as they have a large consumer base.
  - People are always irrational in their choices. There are many reasons for this: social pressure: others' habits make it hard for a person to stop consuming a service. People do not get used to things. Past experiences have no effect. Consumers look at the long-term effect of a good when deciding whether to buy. They often have difficulty in understanding the mathematics surrounding risk and often exaggerate big probabilities.
- Now, in groups of three, cut out the £10 note drawn below.



Person A has the note, and needs to make an offer to Person B as to how much they will give them. If Person B agrees to the offer, both will get the money. If Person B disagrees with the offer, both players will not get anything, and Person A will have the £10. The players may not negotiate and can only have one go at it.

Note down the response and compare with other groups. What does this tell you about how people make choices? Did the As, Bs or Cs in the class come out with the most money? How did the As expect them to when they made their offer? Why did the Bs make the offers they did? Was it rational to get the most money, was it out of a sense of fairness?

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 13 – Indirect Taxes

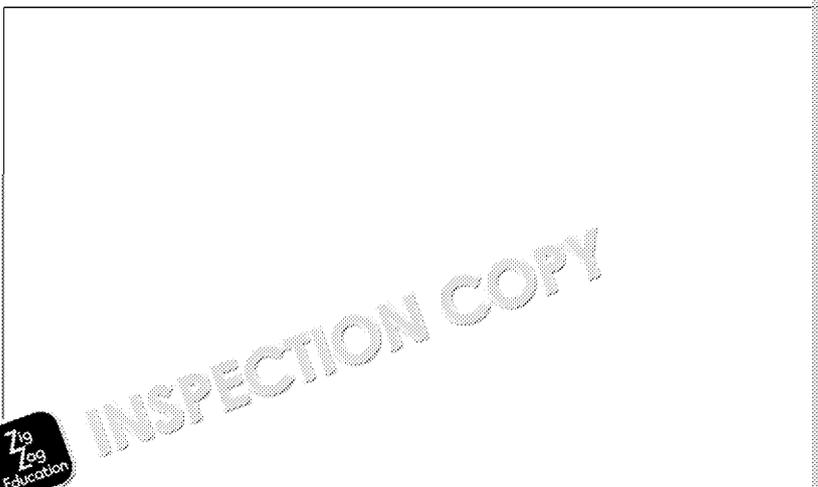
| Price (£) | Quantity supplied of alcohol | Quantity demanded |
|-----------|------------------------------|-------------------|
| 10        | 200                          |                   |
| 12        | 400                          |                   |
| 14        | 600                          |                   |
| 16        | 800                          |                   |
| 18        | 1000                         |                   |
| 20        | 1200                         |                   |

1. Using the above data, work out the following questions.

a) State the equilibrium price.

.....

b) Plot the demand and supply curves below. (Remember to label the curves)



The government has now decided to tax alcohol at £1.50 a bottle.

c) Show this on the above diagram.

d) Calculate the government revenue.

.....  
 .....  
 .....

e) Can you estimate the deadweight loss of tax on:

i) Consumer .....  
 .....

ii) Producer .....  
 .....

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 14 – Subsidies

1. “Subsidy is the opposite of taxation.”

That’s a rubbish definition. Can you do better?

.....

.....

.....

.....



2. The government decides to subsidise solar panels at £100 a panel for all panels. The total cost to the government of the subsidy is £125,000. If the new equilibrium quantity is 1,250 panels, work out the old equilibrium quantity.

.....

.....

.....

.....



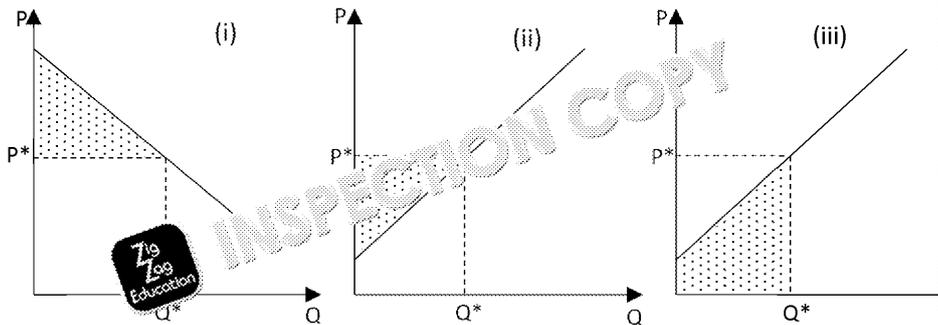
INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 15 – Consumer and Producer

1. Identify which of the following diagrams represent (a) consumer surplus

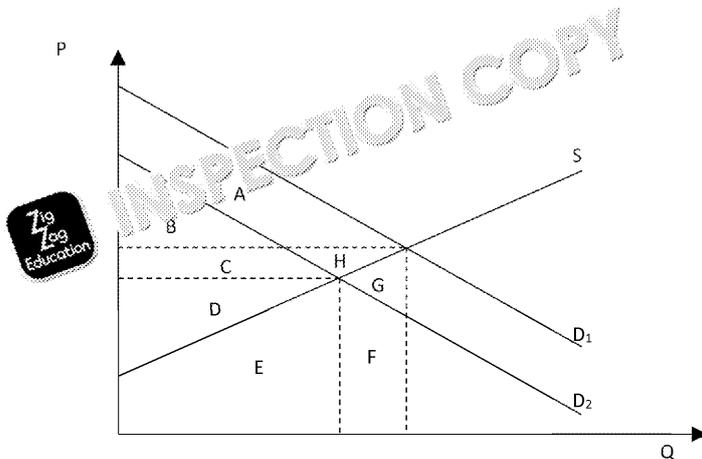


Normalitea Ltd is a producer of teas, coffees and cakes. A new company, which moved in and is offering lower prices. Normalitea Ltd is experiencing a visible

2. a) Why will this move affect demand for Normalitea?

.....

.....



b) Which area in the diagram above represents Normalitea's new consumer surplus?

.....

c) Which area in the diagram above represents Normalitea's new producer surplus?

.....

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 16 – Price Mechanism

1. What are the three main functions of price? Explain what they mean.



2. a) State whether the following statements about the price mechanism are true or false.
- i) If UK emigration exceeds its immigration then the demand for UK goods will increase.
  - ii) Net migration will decrease the demand for housing in the UK.
  - iii) An increase in the demand for housing will extend the supply of housing.
  - iv) A decrease in the demand for housing will cause the supply curve to shift to the left.
  - v) If the UK sees an increase in the number of tourists from other countries, the pound-euro exchange rate will appreciate.

- b) Now write down the correct statements.

- i) .....
- ii) .....
- iii) .....
- iv) .....
- v) .....

INSPECTION COPY

COPYRIGHT  
PROTECTED



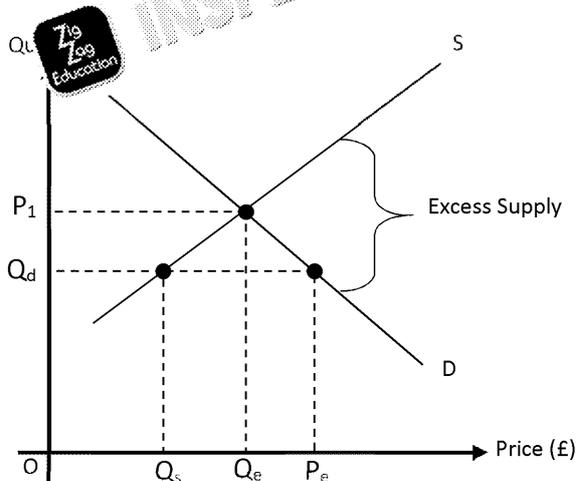
## Activity 17 – Price Determination

1. In pairs, each student should complete part (a) and then pass swap cards with their partner to complete part (b).



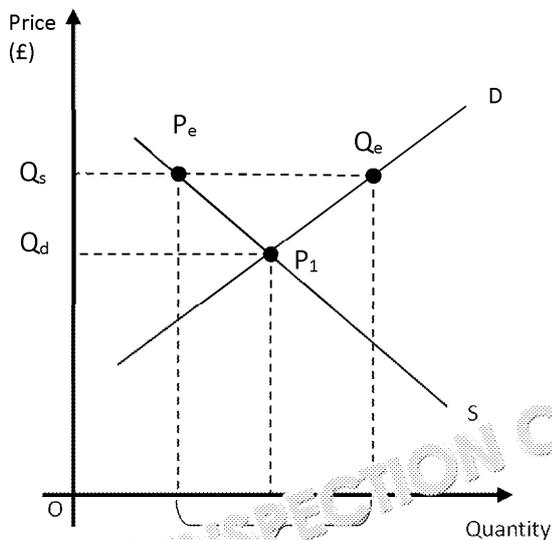
(a) Circle the mistakes in the diagram below.

(b) Get your partner to correct the diagram.



a) Circle the mistakes in the diagram below.

(b) Get your partner to correct the diagram.



INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 18 – Market Failure

1. You have five minutes to write down the definitions to six of the following the person next to you and mark each other's answers.

|                            |  |
|----------------------------|--|
| Market failure             |  |
| Misallocation of resources |  |
| Externality                |  |
| Private cost               |  |
| External cost              |  |
| Social cost                |  |
| Private benefit            |  |
| External benefit           |  |
| Social benefit             |  |
| Marginal private cost      |  |
| Marginal private benefit   |  |
| Marginal social cost       |  |
| Marginal social benefit    |  |
| Marginal analysis          |  |
| Market equilibrium         |  |
| Scarcity                   |  |
| Equilibrium                |  |
| Welfare loss               |  |
| Welfare gain               |  |
| Economic agents            |  |
| Government intervention    |  |
| Public goods               |  |
| Private goods              |  |
| Non-rivalrous goods        |  |
| Non-excludable goods       |  |
| Free-rider problem         |  |
| Symmetric information      |  |
| Asymmetric information     |  |
| Merit goods                |  |
| Demerit goods              |  |

INSPECTION COPY

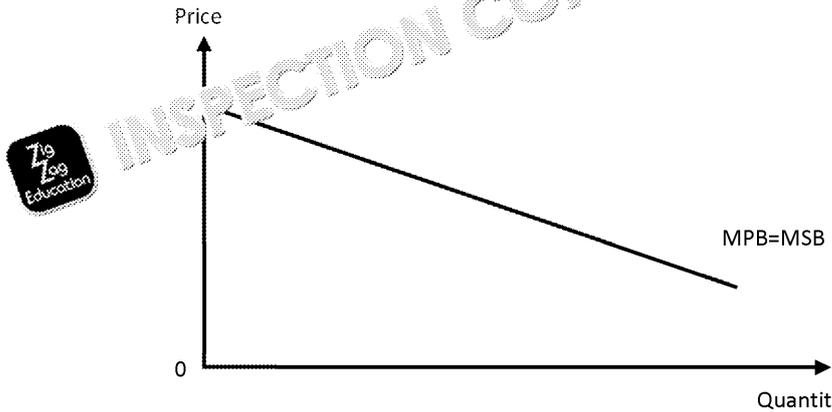
COPYRIGHT  
PROTECTED



# Activity 19 – Market Failure

## Teacher Sheet

Illustrate the diagram below on the board.



Split the class into *five* groups and hand out the following cards. Students show their groups. You will then ask the groups to complete the tasks set out on the



### Group 1

You are the producer of a brand of cigarettes, 'Imperial Smokes'. Illustrate on the board the private cost of producing cigarettes.

### Group 3

You are a member of a committee. Illustrate on the board the *welfare loss* from producing cigarettes.

### Group 2

You are a member of an anti-smoking pressure group. Illustrate on the diagram on the board the cost that you believe is imposed on society by Imperial Smokes producing cigarettes.

### Group 5

You represent the Treasury. Illustrate on the diagram on the board the cost to the production of cigarettes to eliminate welfare loss.

### Group 4

You represent the Department of Health. Briefly explain some measures other than taxation that the government could take to eliminate, or at least reduce, this loss of welfare.

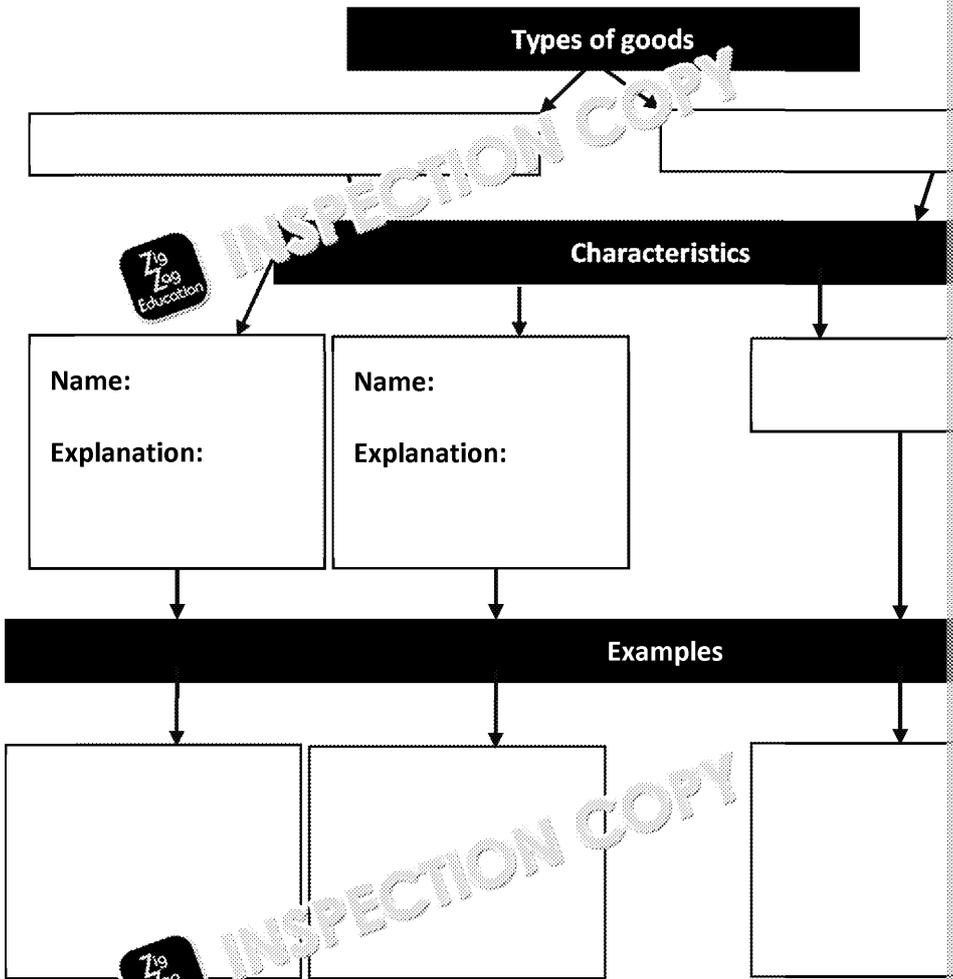
INSPECTION COPY

**COPYRIGHT  
PROTECTED**



# Activity 20 – Market Failure

1. Complete the tree diagram below.



2. Explain the free-rider problem without using any of the words in the term

.....

.....

.....

.....

.....

.....

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 21 – Government Intervention

1. In groups of four, make a brief presentation plan for your class summarising how the government can intervene in markets. You may use one of the following methods used by the government:
- Subsidising merit goods
  - Taxing demerit goods
  - Maximum prices
  - Minimum prices
  - Tradable pollution permits



**Market failure**

.....

.....

.....

**Appropriate**

.....

.....

.....



**Proposed solution**

.....

.....

.....

**Diagram**

.....

.....

.....



**How does the solution work?**

.....

.....

.....

**Evaluation**

.....

.....

.....

INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 22 – Government Failure

1. Explain the difference between government failure and market failure.

.....

.....

.....

.....

.....

2. Below is a list of some of the reasons why governments may cause the market to fail with their correct explanation.

|                               |   |
|-------------------------------|---|
| Information gaps              | Intervention generates additional costs to the government in the form of the compliance of rules, fines, taxes, etc. If the benefits are not greater than the costs, the intervention may be inefficient. |
| Administrative costs          | Government intervention may require some additional resources.  |
| Distortion of price mechanism | Government may have different priorities, which may lead to an incorrect or complete market not taking place to deal with the failure.  |
| Conflicting priorities        | Government decisions may not be well informed due to incomplete information.  |
| Unintended consequences       | There is a misallocation of resources when the price mechanism is not allowed to function.  |

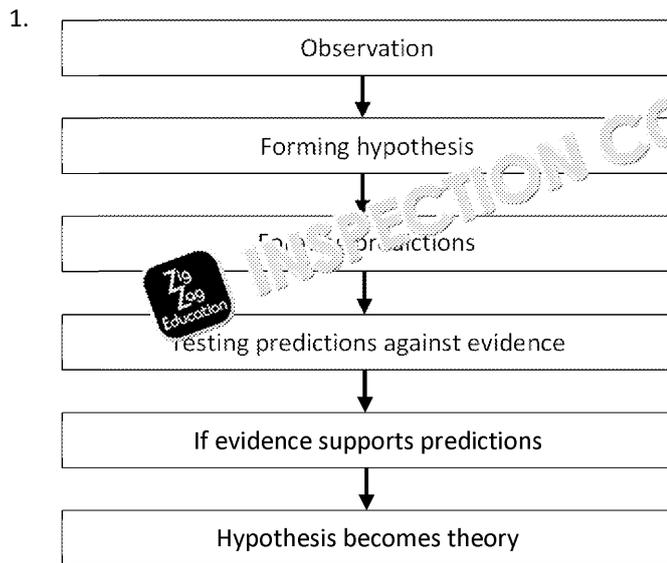
INSPECTION COPY

**COPYRIGHT  
PROTECTED**



# Answers

## Activity 1 – What is economics?



- 2.
- The Bank of England has set the interest rate at a record low of 0.25%.
  - The government is considering imposing a sugar tax.
  - The Bank of England should not have set the interest rate at 0.25%, as it is very low.
  - The Bank of England aims to keep the inflation rate at about 2%.
  - A 2% inflation rate is the perfect level of inflation.

## Activity 2 – The economic problem

1. a) **Needs:**  
Examples may include:
- Cloth
  - Food
  - Water
- Wants:**  
Examples may include:
- Chocolates
  - Computers
  - Cars
- Renewable resources:**  
Examples may include:
- Solar energy
  - Wood
  - Biomass
- Non-renewable resources:**  
Examples may include:
- Coal
  - Oil
  - Gas
2. a) E.g. it represents the value of the next best alternative forgone.  
b)  $15\% - 12\% = 3\%$

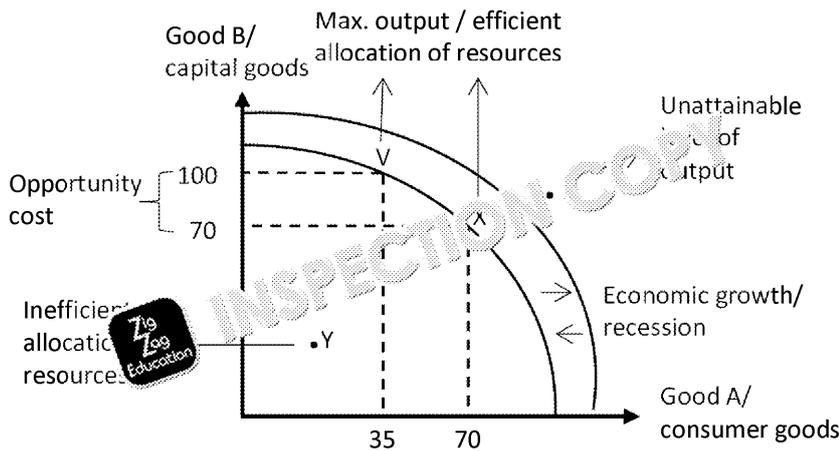
INSPECTION COPY

COPYRIGHT  
PROTECTED



### Activity 3 – Production Possibility Frontiers

1.



2.

| Business Decision                                | Possible Opportunity          |
|--|-------------------------------|
| Clothes shop purchases a new line of shirts      | e.g. a line of regular seller |
| IT firm repays its loan                          | e.g. new equipment            |
| School employs more lunchtime staff              | e.g. teaching assistants      |
| Record shop pays a musician to visit and play    | e.g. new stock                |
| Educational publisher writes a new business book | e.g. economics book           |
| Football team buys foreign player                | e.g. local player/s           |
| Bank opens in a new location                     | e.g. promotional market       |

### Activity 5 – Types of Economies

- Adam Smith
  - Karl Marx
  - Friedrich Hayek
  - Karl Marx
  - Adam Smith
  - Friedrich Hayek

2.



INSPECTION COPY

**COPYRIGHT  
PROTECTED**



## Activity 6 – Income/Cross Elasticity of Demand (YED/XED)

1.



Negatively elastic / inelastic demand /  $YED < 0$  / Inferior good

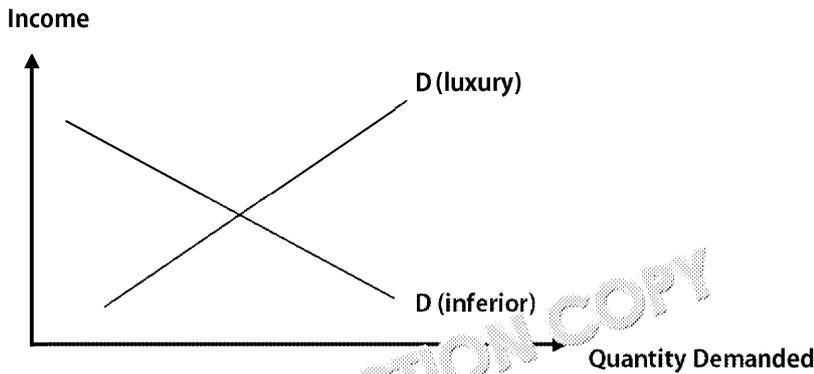


Positively inelastic demand /  $YED < 1$  / Normal good / necessary



Positively elastic demand /  $YED > 0$  / Normal / luxury good

2.



3. a) The change to which there is a change in the demand for a good A, following a change in the price of good B.
- b)  $YED$  bigger than 1 suggests that cross elasticity of demand is elastic. This means that a rise in the price of Pepsi will result in a massive increase in the demand for Coca-Cola. Likewise, a fall in the price of Pepsi will result in a massive decrease in demand for Coca-Cola. Marginaly, it will experience a massive increase in demand, as consumers switch to the cheaper product.

INSPECTION COPY

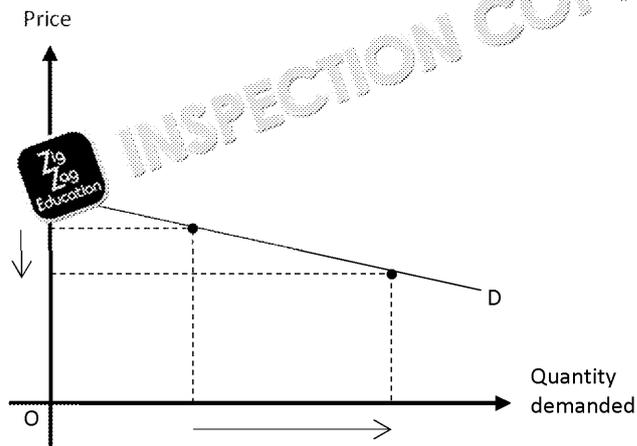
COPYRIGHT  
PROTECTED



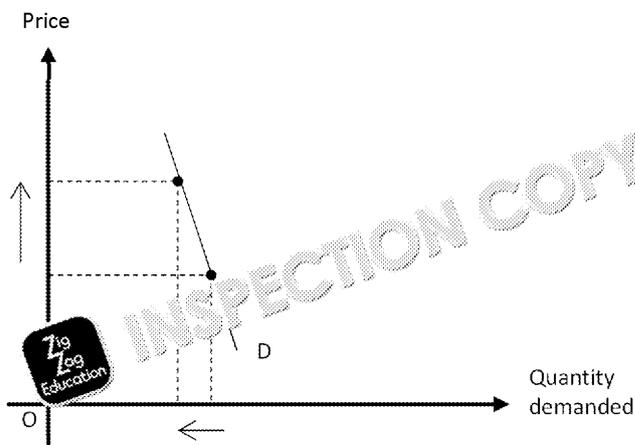
## Activity 7 – Price Elasticity of Demand

1. PED measures the responsiveness of demand following a change in the price of a good
2. Price Elasticity of Demand =  $\frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}}$

3. a) Total revenue = Price  $\times$  quantity  
b)



c)



- d) When demand is unit elastic.

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 8 – Elasticities

A. % change in demand =  $\frac{500,000 - 1,000,000}{1,000,000} \times 100 = -50\%$

% change in price =  $\frac{10 - 5}{5} \times 100 = 100\%$

PED (chocolates) =  $\frac{-50}{100} = -0.5$

Inelastic demand

B. % change in supply =  $\frac{500,000 - 300,000}{300,000} \times 100 = 66.67\%$

% change in price =  $\frac{3 - 2}{2} \times 100 = 50\%$

PES (soup) =  $\frac{66.67}{50} = 1.3$

Elastic supply

C. % change in demand =  $\frac{150,000 - 50,000}{50,000} \times 100 = 200\%$

% change in income =  $\frac{35,000 - 30,000}{30,000} \times 100 = 16.67\%$

YED (flowers) =  $\frac{200}{16.67} = 12$  (approx.)

Luxury good

D. % change in demand =  $\frac{10 - 20}{20} \times 100 = -50\%$

% change in income =  $\frac{500 - 1,000}{1,000} \times 100 = 50\%$

YED (wine) =  $\frac{-50}{50} = -1$

Inferior good

E. % change in demand of tea =  $\frac{5 - 15}{15} \times 100 = -66.67\%$

% change in price of milk =  $\frac{2 - 1}{1} \times 100 = 100\%$

XED (tea or milk) =  $\frac{-66.67}{100} = -0.67$

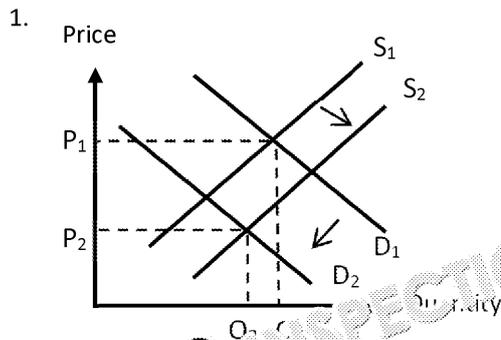
Complementary goods

INSPECTION COPY

COPYRIGHT  
PROTECTED



## Activity 11 – Supply and demand



2. Common goods such as oil, tend to have an inelastic demand, as well as an inelastic supply. A change in price brings about a much smaller change in demand or supply of oil – particularly in the case of supply. The discovery of new sources of oil. As a result, there is great price volatility in the market for oil. Oil faces frequent changes – and these changes are often large.

## Activity 12 – Consumer behaviour

1. a) People are **always** rational. Consumers want to satisfy their needs and, hence, buy higher quality products because they are likely to be higher quality. People **will always** switch to higher quality products if it benefits them. Firms, too, are rational in their decision making. As a result, firms always choose the price that gives them **lower profit margins**, as lower prices help to widen the consumer base.

Corrections:

- People tend to be but aren't always rational.
- Not everyone is satisfied with higher quality goods and services – sometimes people prefer lower quality. Also high price is not a guarantee of high quality.
- Different firms have different objectives (i.e. some firms may not want to maximise profit, they may want to earn more profit).

- b) People are **always** rational in their choices. There are many reasons for this. People are often **addicted** to things, making it hard for a person to stop consuming a certain good or service. Past experiences have **no** impact on people's decisions. Consumers lose weight when deciding whether to consume it. People often have difficulty in understanding the consequences of their choices: they tend to exaggerate **big** probabilities.

Corrections:

- People are sometimes irrational in decision making.
- One's own habits make it hard for a person to stop consuming a certain good or service.
- People do get used to things.
- Past experiences do have an impact on people's decisions.
- Consumers' decisions tend to be based on the short-term effects/utility.
- People tend to exaggerate small probabilities.

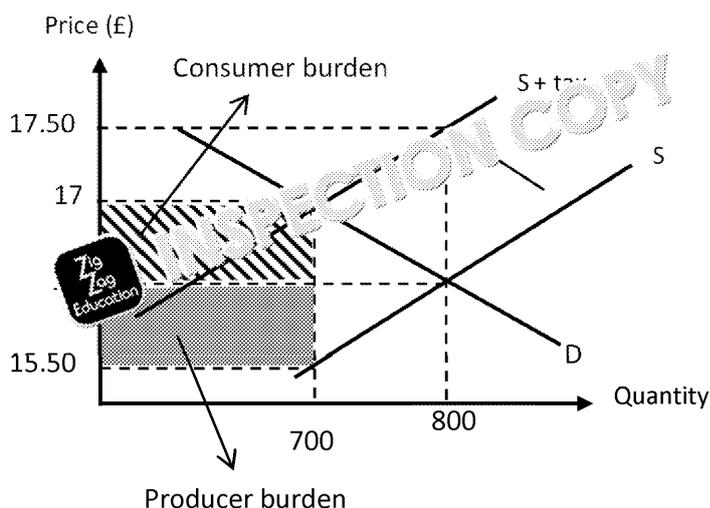
INSPECTION COPY

COPYRIGHT  
PROTECTED



### Activity 13 – Indirect taxes

1. a) £16  
b) and c)



- d)  $700 \times 1.50 = \text{£}1,050$
- e) i)  $1 \times 700 = \text{£}700$   
ii)  $0.5 \times 700 = \text{£}350$

### Activity 14 – Subsidies

1. E.g. A sum of money, typically given by the government, to contain producers to ensure goods produced and sold at a cheap price. However, subsidies are not just used to ensure goods produced, they are also employed to achieve other socio-economic objectives.
2.  $\frac{125,000}{100} = 1,250$  solar panels are subsidised  
 $1,500 - 1,250 = 250$  solar panels (original quantity)

### Activity 15 – Consumer and producer surplus

1. (i) Consumer surplus  
(ii) Producer surplus
2. a) It will affect the demand for Normalitea's products because the competitor supply is in paribus, when the substitute good is cheaper, we'd expect people to reduce the quantity demanded of the good.  
b) Consumer surplus = B + C  
c) Producer surplus = D

### Activity 16 – Price mechanism

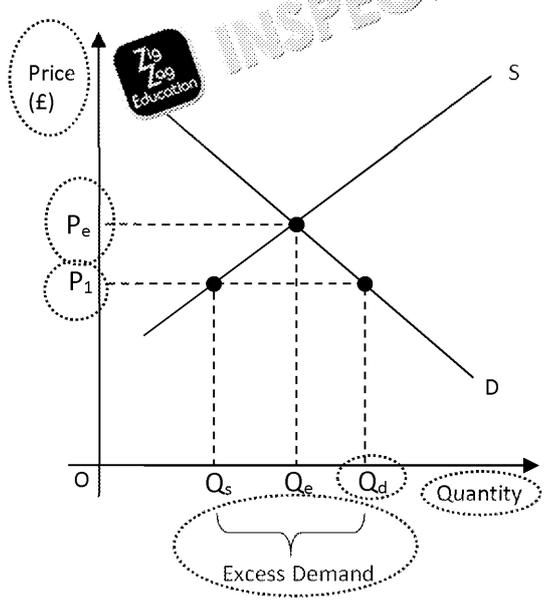
1. **Rationing**  
Given that resources are scarce, some goods and services that we produce from them are rationed. A rationing device is used to allocate goods and services to consumers who are ready to pay for them.  
**Signalling**  
Price changes in demand and supply. For example, an increase in price would signal an increase in demand. So, producers would need to expand supply to get rid of the excess demand.  
**Incentive**  
Increasing the price means producers are encouraged to produce more goods and services to benefit from higher profits.

**COPYRIGHT  
PROTECTED**

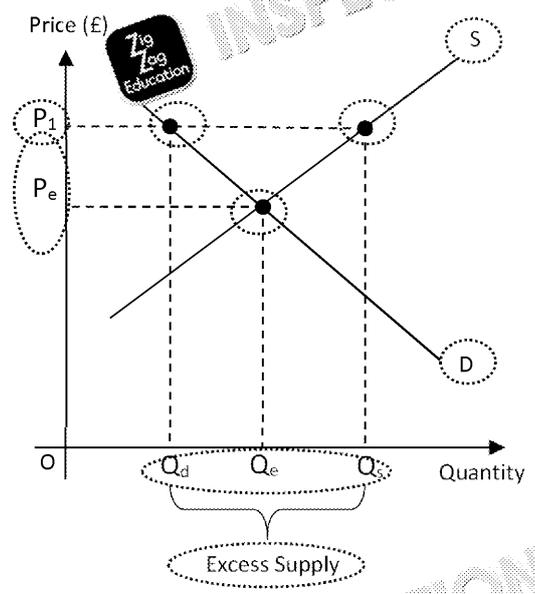


2. a) i) false  
 ii) false  
 iii) true  
 iv) false  
 v) true
- b) i) If UK **immigration** exceeds its **emigration** then the demand for UK housing  
 ii) Net migration will **increase** demand for housing in the UK.  
 iv) A decrease in the demand for housing will cause the **demand** curve to shift

### Activity 17 – Price determination



Corrected marks indicated by



**COPYRIGHT  
 PROTECTED**



## Activity 18 – Market failure

1.

|                                   |  |
|-----------------------------------|--|
| <b>Market failure</b>             | This refers to the misallocation of resources that results when left alone.  |
| <b>Misallocation of resources</b> | This refers to the inefficient use of resources. In other words, the best possible way, which means the market is not working.   |
| <b>Externality</b>                | This refers to the additional consequences, positive or negative, that result from a transaction.  |
| <b>Private cost</b>               | This is the direct cost of production to the producer.   |
| <b>External cost</b>              | This is the cost to the third party of production or consumption.  |
| <b>Social cost</b>                | This is the external cost and private cost combined.   |
| <b>Private benefit</b>            | This is the direct benefit or utility of consumption to the consumer.  |
| <b>External benefit</b>           | This is the benefit to the third party of production or consumption.   |
| <b>Social benefit</b>             | This is the external benefit and private benefit combined.   |
| <b>Marginal private cost</b>      | This is the private cost of producing one more unit of a good or a service.  |
| <b>Marginal private benefit</b>   | This is the private benefit of consuming one more unit of a good or a service.   |
| <b>Marginal social cost</b>       | This is the cost of producing one more unit of a good or a service, including external costs.  |
| <b>Marginal social benefit</b>    | This is the benefit of consuming one more unit of a good or a service, including external benefits.  |
| <b>Marginal analysis</b>          | This refers to gaining understanding on effects of producing or consuming one more unit of goods, as opposed to the overall production or consumption.                             |
| <b>Market equilibrium</b>         | This is where the marginal private benefit is the same as the marginal private cost of producing and consuming a good or a service.  |
| <b>Social optimal equilibrium</b> | This is where the marginal social benefit is the same as the marginal social cost of producing and consuming a good or a service.  |
| <b>Welfare loss</b>               | This refers to the loss in efficiency that results from the market not being at the socially optimal equilibrium.  |
| <b>Welfare gain</b>               | This refers to the gain in efficiency as the market moves towards the socially optimal equilibrium.  |
| <b>Economic agents</b>            | These are the stakeholders in an economy (i.e. they have an interest in the economy).  |
| <b>Government intervention</b>    | This refers to the measures that a government undertakes to correct market failure.  |
| <b>Public goods</b>               | These are goods that are non-excludable and non-rivalrous.   |
| <b>Private goods</b>              | These are goods that can be used by only one consumer at a time.   |
| <b>Non-rivalrous goods</b>        | These are goods that can be used by many consumers at the same time.   |
| <b>Non-excludable goods</b>       | These are goods that can even be used by consumers who do not pay for them.  |
| <b>Free-rider problem</b>         | This refers to the problem that is created by public goods where some people benefit from the goods without paying for them.   |
| <b>Symmetric information</b>      | This is a scenario where consumers and producers know the same information regarding a good or a service.  |
| <b>Asymmetric information</b>     | This is a scenario where either the consumers or the producers have more information than the other.   |
| <b>Merit goods</b>                | A product that is under-consumed – perhaps due to lack of information or imperfectly understood benefits. Often governments will provide these products for free or at a discount. |
| <b>Demerit goods</b>              | A product that is over-consumed if the market is left alone. Governments will regulate this type of product to reduce consumption.   |

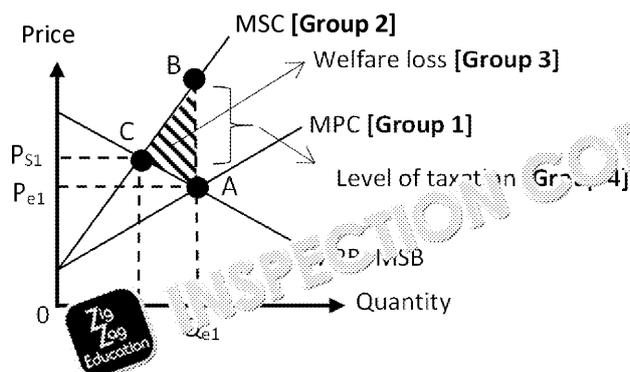
INSPECTION COPY

**COPYRIGHT  
PROTECTED**



### Activity 19 – Market failure 2

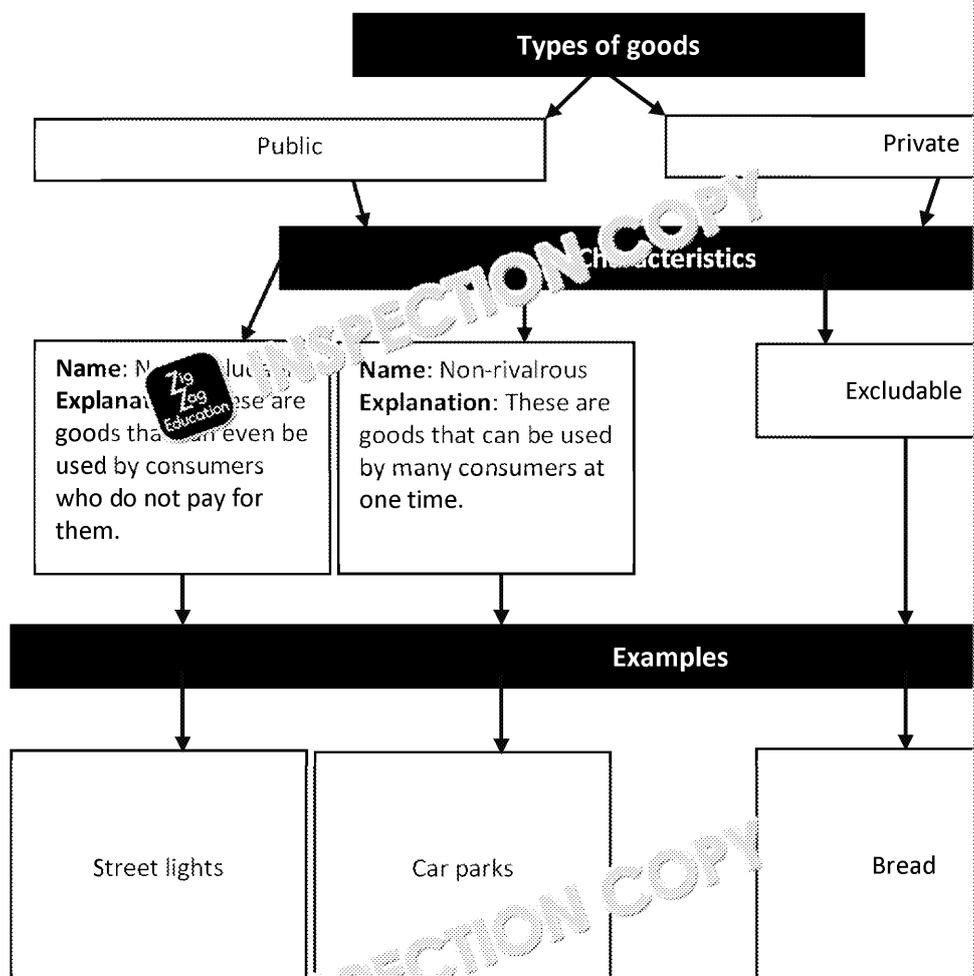
1.



[Group 5] The government could provide information about the harmful effects of smoking in public places; it could provide consumer subsidies for tobacco alternatives like e-cigarettes.

### Activity 20 – Market failure 3

1.



2. For example, the externalities to the issue that is created by public goods because some people do not pay for them.

COPYRIGHT PROTECTED



## Activity 22 – Government failure

1. Market failure refers to the misallocation of resources that results from the price mechanism.

Government failure refers to the misallocation of resources that results from measures that do not correct the initial misallocation of resources caused due to market failure.

2.

| Reasons  | Explanation  |
|--|--|
| Information gaps   | Government decisions may not be fully informed by accurate information.  |
|  Administrative costs | Intervention generally has high administration costs for government for monitoring compliance of rules and regulations. These costs may be greater than the benefits intended. |
| Distortion of price mechanism  | There is a misallocation of resources when the price mechanism does not function freely.   |
| Conflicting priorities   | Government may have conflicting priorities, which may compromise measures taking place to deal with market failure.  |
| Unintended consequences  | Government intervention may have some additional negative effects.   |

INSPECTION COPY

COPYRIGHT  
PROTECTED

